

**AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS**

1-3. (CANCELED)

4. (CURRENTLY AMENDED) A method for determining whether a connection is closed between a local node and a plurality of remote nodes, the method comprising;  
simultaneously transmitting a unique address from the local node, through the connection, to ~~at least one~~ all of the remote nodes;  
changing the impedance of [[the]] at least one of the remote nodes in response to said unique address being received at the at least one of the remote nodes;  
through the connection, sensing the impedance change of the at least one of the remote nodes and determining therefrom that the connection is closed.

5. (PREVIOUSLY PRESENTED) The method of claim 4 further comprising sensing an open impedance of the at least one of the remote nodes and determining therefrom that the connection is open.

6. (PREVIOUSLY PRESENTED) The method of claim 4 wherein said unique address is comprised of  $n$ -bits.

7. (PREVIOUSLY PRESENTED) The method of claim 4 wherein said step of transmitting said unique address occurs when the connection is free from other communication.
8. (PREVIOUSLY PRESENTED) The method of claim 4 wherein said step of determining the connection is closed further comprises a comparison between a voltage of the local node and a reference voltage.
9. (PREVIOUSLY PRESENTED) The method of claim 4 wherein said step of determining the connection is open further comprises a comparison between said voltage of the local node and said reference voltage.

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10-12. (CANCELED)

13. (NEW) In a network having a local node connected to a plurality of remote nodes, where each remote node has an associated connection, a method for determining whether the connection is closed between the local node and the remote node associated with the connection, the method comprising;
- transmitting a unique address from the local node, through the connections, to the remote nodes simultaneously;
- changing the impedance of at least one of the remote nodes in response to said unique address being received at the at least one of the remote nodes;
- sensing the impedance change of the at least one of the remote nodes and determining therefrom that the one of the connections associated with the at least one of the remote nodes is closed.
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14. (NEW) The method of claim 13 further comprising sensing an open impedance of the at least one of the remote nodes and determining therefrom that the connection is open.
15. (NEW) The method of claim 13 wherein said unique address is comprised of  $n$ -bits.
16. (NEW) The method of claim 13 wherein said step of transmitting said unique address occurs when the connection is free from other communication.

17. (NEW) The method of claim 13 wherein said step of determining the connection is closed further comprises a comparison between a voltage of the local node and a reference voltage.
18. (NEW) The method of claim 13 wherein said step of determining the connection is open further comprises a comparison between said voltage of the local node and said reference voltage.